REMARKS

Claims 1 – 14, 16, 18 – 22 and 27 – 36 are pending in the present application. Claims 15, 17 and 23 – 26 are canceled by the present amendment, and claims 33 – 36 are newly added. Reconsideration of the application is respectfully requested.

In section 3 of the Office Action, claims 1, 8 and 24 – 26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,763,325 to Stone (hereafter "the Stone patent"). Applicant is canceling claims 24 - 26, thus rendering moot the rejection thereof. Applicant is clarifying an aspect of claim 1 that is not disclosed by the Stone patent.

Claim 1 provides for a system for optimizing the performance of an operating crew of at least one aerial vehicle during at least one close-in air combat. The system includes an assessment and guidance software application implemented on at least one computer for providing in real-time automatic situation assessment, generating dynamically at least one indication and communicating at least one indication as guidance to the operating crew of the at least one aerial vehicle, wherein the assessment relates to a situation of a dog fight air combat between two aircraft vehicles.

The Stone patent discloses a simulator for air combat using an artificial intelligence (AI) unit representing each aircraft and other modules that determine the tactic, strategy, and select the target. The Stone patent relates to the general aspects of a tactic air battle, not to decisions that relate to a close-in maneuvering dog fight air combat, in which two aircraft fight each other.

Unlike the system disclosed by the Stone patent, the system disclosed in the present application provides for assessment and guidance that relate to basic air combat maneuvers between two real aircraft vehicles and the actions required to win that air combat. The system disclosed in the present application provides optimal information and guidance to a single aircraft vehicle during an air combat between two aircraft vehicles.

Further, the assessment and guidance disclosed in the present application may relate to unexpected actions taken by the adversary, while the commands and options disclosed in the AI units of the Stone patent

are limited to a set of instructions or actions stored in the AI units or server. Additionally, the present application discloses various aspects of maneuvering the aircraft vehicle during the air combat, while the Stone patent discloses such maneuvers in general terms, to be used during regular flights or during tactical situations, not during air combat which requires specific maneuvers, as in the system of the present application. The assessment and guidance software application of the present application provides accurate real-time commands as to the flight path and speed required to win the dog fight combat.

The system disclosed in the present application is independent from other computerized systems, unlike the system disclosed in the Stone patent, which requires communication with other AI units. Hence, while the system disclosed by the Stone patent handles its analysis using known decisions of other AI units that represent another aircraft vehicle, the system of the present application receives data according to the opponent's behavior, and hence contains less predictable data than the system disclosed by the Stone patent.

Thus, whereas the Stone patent discloses a simulator for air combat, the Stone patent does not disclose an assessment and guidance software application implemented on at least one computer for providing **in real-time automatic situation assessment**, generating dynamically at least one indication and communicating the at least one indication as **guidance to the operating crew** of the at least one aerial vehicle, **wherein said assessment relates to a situation of a dog fight air combat between two aircraft vehicles**, as recited in claim 1. Therefore, the Stone patent does not anticipate claim 1.

Claim 8 depends from claim 1. By virtue of this dependence, claim 8 is also novel over the Stone patent.

Applicants are requesting reconsideration and a withdrawal of the section 102(e) rejection of claims 1, 8 and 24 – 26.

In section 5 of the Office Action, claims 2 – 7, 10 – 23 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Stone patent in view of U.S. Patent No. 5,807,109 to Tzidon et al. (hereinafter "the Tzidon et al. patent"). Claim 23 is canceled, and as such, the rejection thereof is rendered moot. Applicant is traversing the rejection of claims 2 – 7, 10 – 22 and 30 - 32.

Claims 2 – 7 and 10 – 23 depend from claim 1. Above, Applicant explained that the Stone patent does not disclose all of the features of claim 1.

The Tzidon et al. patent discloses a system for analyzing an air combat after the combat is over based on data retrieved during the combat. The system disclosed in the Tzidon et al. patent does not guide the operating crew of the aircraft vehicle. The Tzidon et al. patent provides a summary of the combat, not a preferred solution or the like. The Tzidon et al. patent discloses elements that show what the crew should have done in a specific situation, for example specific missiles to avoid the adversary's weapon. Therefore, the combination of a simulator of a tactic battle, as disclosed in the Stone patent, and a system that performs post-vehicle analysis of a battle, as disclosed in the Tzidon et al. patent, does not provide for a real time assessment system of an air combat maneuvering between two aircraft vehicles. Thus, the cited combination of the Stone and Tzidon et al. patents does not disclose an assessment and guidance software application implemented on at least one computer for providing in **real-time automatic situation assessment**, generating dynamically at least one indication and communicating the at least one indication as **guidance to the operating crew** of the at least one aerial vehicle, **wherein said assessment relates to a situation of a dog fight air combat between two aircraft vehicles**, as recited in claim 1. Hence, claim 1, and claims 2 – 7 and 10 – 23, by virtue of their dependence on claim 1, are all patentable over the cited combination of the Stone and Tzidon et al. patents.

Claim 30 provides for an apparatus for optimizing the performance of an operating crew of at least one aerial vehicle during at least one close-in air combat by providing in real-time automatic situation assessment. For reasoning similar to that provided above in support of claim 1, Applicant submits that the cited combination of the Stone and Tzidon et al. patents does not disclose **real-time automatic situation assessment**, as recited in claim 30. Thus, claim 30 is patentable over the cited combination of the Stone and Tzidon et al. patents.

Claims 31 and 32 depend from claim 30. By virtue of this dependence, claims 31 and 32 are also patentable over the cited combination of the Stone and Tzidon et al. patents.

Applicant is requesting reconsideration and a withdrawal of the section 103(a) rejection of claims 2 – 7, 10 – 23 and 30 – 32.

In section 6 of the Office Action, claims 9 and 27 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Stone patent in view of U.S. Patent No. 5,587,904 to Ben-Yair et al. (hereinafter "the Ben-Yair et al. patent"). Applicant is traversing this rejection.

Claim 9 depends from claim 1. Applicant submits that the Ben-Yair et al. patent does not make up for the deficiency of the Stone patent at it relates to claim 1. Accordingly, Applicant submits that claim 1, and claim 9, by virtue of its dependence on claim 1, are both patentable over the cited combination of the Stone and Ben-Yair et al. patents.

Claim 27 is an independent claim provides a method for optimizing the performance of an operating crew during close-in air combat, using, inter alia, weapon system characteristics and sensor-specific information. The method includes, obtaining aircraft weapon system characteristics information, and obtaining remotely sensor-specific information.

In the Stone patent, since AI units are fed with data from a server, the AI units do not contain sensors. Further, the tactic approach of Stone does not refer to a method to overcome another specific aircraft vehicle, and hence does not include information relating to a weapon system. Applicant submits that the cited combination of the Stone and Ben-Yair patents does not disclose obtaining **aircraft weapon system characteristics information**, and obtaining remotely **sensor-specific information**, as recited in claim 27. Thus, Applicant further submits that claim 27 is patentable over the cited combination of the Stone and Ben-Yair patents.

Claims 28 and 29 depend from claim 27. By virtue of this dependence, claims 28 and 29 are also patentable over the cited combination of the Stone and Ben-Yair patents.

Applicant is requesting reconsideration and a withdrawal of the section 103(a) rejection of claims 9 and 27 – 29.

As mentioned above, Applicant is clarifying an aspect of claim 1 that is not disclosed by the Stone patent. Applicant is amending claim 4 to provide consistent terminology, and amending claim 10 to correct a typographical error.

Applicant is adding claims 33 – 36 to further provide the claim coverage that Applicant appears to deserve based on the art that is cited in the Office Action. For example, due to the tactical approach of the system disclosed in the Stone patent, the Stone patent does not refer to any weapon or protection effect during combat, for example identifying enemy's missiles, enemy's escape capabilities and techniques, and determine the best offensive or defensive decision accordingly. The tactical approach refers more to determining the locations of each aircraft vehicle from a plurality of aircraft vehicles during a group air combat. The tactical approach relates to understanding a group battle, for example how to react when two aircraft vehicles battle three enemy aircraft vehicle. The present application provides a solution for a different situation, and as a result, uses a different set of rules and different tools. For example, the system disclosed in the present application utilizes data that relates to ammunition, as disclosed in new claim 33. Further, the system of the present application identifies the aircraft vehicle to determine the guidance, as disclosed in new claim 35.

In view of the foregoing, Applicant respectfully submits that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Respectfully submitted,

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